King Saud University Ordering Book System

Currently, the advancement in information technology has led to a significant impact to the higher education institutes, especially paving the way of new teaching and learning experiences. Modern trends have changed the procedures of obtaining the books and other teaching materials. The procedures include selecting the publisher, ordering the books and delivery. Therefore, most of the university's book stores nowadays prone to purchase books online. Through online ordering book, data can be managed properly; minimizing shipping costs dramatically, increases the profit margins and provides competitive advantage to the vendors who find ways to minimize shipping costs.

King Saud University is similar to any other universities, which has its own procedure in purchasing books for students. The common practice is where most lecturers directly order the books from vendors. After distributing the required books to the lecturers and upon receiving the recommendation, the vendor will then sell those books to students. All flow of processes is done manually. Some universities do not allow their lecturers to order books directly from the vendor but this task will be handled by the university's bookstore.

However, the ordering is still done manually. This could attributes to problems mainly time consuming, and books may not be delivered to the right person or faculties due to many parties involved along the way of the ordering processes. There is also possible mismatch between estimated number of students provided to the vendor and the number of actual student that will register when the new semester start, which as a result will affect the availability of the books in the university's bookstore. Additionally, the delivery may be delayed and creates inconvenience for the lecturers and students to start the class without the main text. Hence, though the conventional way of ordering process seems to be simple, yet problems can exist at any stage of the chain, from the ordering books until the arrival, or vice versa.

E-service quality has turned into a quickly moving target due to the pace of competition and the ease of duplicating service features in the online world. To take advantage of these technologies advancement, KSU needs to embrace technological solutions such as developing a Book Ordering System for the university's bookstore that can transform a painfully slow ordering strategy to world class overnight.

Throughout the semester, you will be required to; (1) investigate the problem domain further, (2) identify the main stakeholders and functions, (3) analyze and design a suitable information system that serves the needs of KSU Ordering Book System.

Course Project: (23 marks) Each student will participate as a member of an assigned team to complete the project. Students can expect to encounter a variety of interesting challenges in learning the concepts of system analysis and design. Learning to effectively use a system modeling tool will also be part of the project process.

Make sure your document is presentable and does not contain any spelling and grammar mistakes. **(2 marks)**

- Teams will work on satisfying the requirements for each project millstone, look below for more details of each millstone and its requirements:

Milestone 1: Project Proposal (4.5 marks): The first milestone will allow the students to work as part of a team to write up a project proposal directed to a client (the university's bookstore or CBA departments, in this context).

Students will have to work on:

(1) Identifying the project goals and the business process. **(1.5 marks)**

(2) Planning and gathering business requirements through the interview process. The report will include the functional and non-functional requirements; in addition to the interview's questions and answers. **(2 marks)**

(3) Maintain a line of communication with the client using email or Face-to-Face meetings. **(1 marks)**

Milestone 2: Analyzing: (9.5 marks) The second milestone require the students to discover and understand project details using different analyses techniques learned during class lectures following UML standards and using different modeling tools (like Visio, Lucid Chart, Creately). Students will have to work on:

(1) Identifying the project Use cases. **(2.5 marks)**

(2) Submitting <u>three</u> Use case Specifications. **(2.5 marks)**

(3) Submitting a completed Class Diagram that illustrates the object classes and relationships involved in the Use Cases identified for the project solution. **(2 marks)**

(4) Drafting the Data Flow Diagrams (DFDs). This will include both the context and Level 0 diagrams. **(2.5 marks)**

Milestone 3: Designing: (5 marks) The third and final milestone in this course will require the students to design a system solution for the client problem following different tools (like Proto.io, InVision and Visual Basic). Students will have to work on:

(1) Creating an Activity Diagrams that shows the sequence of actions and events for the proposed solution. **(2 marks)**

(3) Present a prototype for the user interface design intended for the new system solution. **(3 marks)**

The presentation of the projects—team members who will participate in the final presentation will receive **2 marks**. **(The presentation will take place during the lab class hours).**

Note, that individuals might receive different presentation marks based on their ability in presenting and answering the instructor's questions.